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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,805	06/28/2001	Brian M. Grunkemeyer	MS174304.1	7100

27195 7590 04/27/2006

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EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT PAPER NUMBER

2616

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,805

Applicant(s)

GRUNKEMEYER ET AL.

Examiner

Andrew C. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 24-30 is/are allowed.
6) ☒ Claim(s) 1-5, 13 and 15-18 is/are rejected.
7) ☒ Claim(s) 6, 7, 8, 9, 10, 11, 12, 14, 19, 20, 21, 22, 23 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 3, 4, 5, 13, 15, 16, 17, 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Schofield (U.S. 6253252 B1).

Regarding claim 1, Schofield discloses the limitation of a system for converting a synchronous method call on a target method to an asynchronous method call (column 8, lines 45 – 54, recited “ synchronous and asynchronous calls implementation; column 13, lines 4 – 11; recited “the call is synchronous and the implementation of the object is asynchronous” as converting a synchronous method call on a target method to an asynchronous method call), the system comprising: a pattern generator operable to break the synchronous method call into one or more constituent parts (Fig. 4, element 111 code generator, column 7, lines 25 – 34; column 8, lines 56 – 63, recited “a synchronous call to an object and a synchronous implementation of the object, see Fig. 5” as to break the synchronous method call into one or more constituent parts (constituent parts as objects)); and a pattern data store, operably connected to the pattern generator, the pattern data store adapted to store data associated with converting a synchronous method call to an asynchronous method call (column 9, lines 33 – 37, recited “ proxy handle” as a pattern data store; and proxy to store a completion routine address that is used in an

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asynchronous object call as the pattern data store adapted to store data associated with converting a synchronous method call to an asynchronous method call).

Regarding claim 2, Schofield discloses the limitation of the system of claimed where the one or more constituent parts comprise at least one of: a begin asynchronous operation method (column 8, lines 29 – 34, recited “asynchronous stud function call CEE_SET_METHOD” as begin asynchronous operation method); an end asynchronous operation method, an asynchronous call state object; and an asynchronous call result object.

Regarding claim 3, Schofield discloses the limitation of the system of claimed where the begin asynchronous operation method accepts as inputs at least one of: input parameters presented to the target method; input/output parameters presented to the target method; parameters passed by reference to the target method; the address of an asynchronous callback routine (column 4, lines 12 – 15, recited “”callback” function as address of an asynchronous callback routine); and the asynchronous call state object.

Regarding claim 4, Schofield discloses the limitation of the system of claimed where the begin asynchronous operation method returns the asynchronous result object (column 8, lines 29 – 41; recited “asynchronous stud function call CEE_SET_METHOD” as begin asynchronous operation method; and “CEE_RESPOND” as the asynchronous result object).

Regarding claim 5, Schofield discloses the limitation of the system of claimed where the end asynchronous operation method accepts as inputs at least one of: input/output parameters presented to the target method (column 7, lines 64 – 65; recited “receive the input parameters” as input/output parameters); output parameters presented to the target method; parameters passed by reference to the target method; and the asynchronous call result object.

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Regarding claim 13, Schofield discloses the limitation of the system of claimed where the pattern generator can convert method calls associated with at least one of file input/output, stream input/output, socket input/output, networking (column 5, lines 22 – 23, recited “client/server system” as networking), remoting channels, proxies, web forms, web services and messaging message queues.

Regarding claim 15, Schofield discloses the limitation of a computer readable medium storing computer executable components of the system of claim 1 (column 5, lines 2 – 4, recited “a CPU and a memory for storing current state information about program execution” as computer readable medium storing computer executable components of the system).

Regarding claim 16, Schofield discloses the limitation of a system to facilitate making asynchronous calls on a target method (column 8, lines 45 – 54, recited “synchronous and asynchronous calls implementation), the system comprising: synchronous method call code associated with a client caller (column 7, lines 58 – 59, recited “the synchronous client stud function” as synchronous method call code associated with a client caller), the synchronous method call code is broken into constituent parts (column 7, lines 58 – 64, recited “the operation’s input parameters and a reference to the objects” as synchronous method call code is broken into constituent parts); an asynchronous call initializer adapted to accept input parameters from a client caller and to forward the input parameters towards the target method (column 7, lines 64 – 67, recited “asynchronous client stud functions receive input parameters” as asynchronous call initializer adapted to accept input parameters from a client caller), the asynchronous call initializer further adapted to establish a callback routine, where the callback routine can be invoked upon completion of the target method (column 10, lines 54 – 60, recited

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“the completion routine (as callback routine see column 4, line 12)” as establishing a callback routine), the asynchronous call initializer further adapted to accept a state object and to populate one or more fields in the state object with state values associated with the asynchronous call, the asynchronous call initializer further adapted to return a result object to the client caller (column 15, lines 21 – 53; Fig. 3, column 8, lines 11 – 22); an asynchronous call completer adapted to accept results generated by the target method and to supply the results to the client caller, the asynchronous call completer further adapted to update the state object, the asynchronous call completer further adapted to update the result object (column 11, lines 21 – 28, recited “the client –side CEE stores the completion routine address in the proxy handle” as to update the state object and the result object); and a state tracker, operable to track and log state related to processing associated with the asynchronous call initializer, the asynchronous call completer and the target method, the state tracker further operable to update the state object (column 13, lines 25 – 36; recited CEE will track each call with a different call identifier” as a state tracker).

Regarding claim 17, Schofield discloses the limitation of a computer readable medium storing; computer executable components of the system of claim 16 (column 5, lines 2 – 4, recited “ a CPU and a memory for storing current state information about program execution” as computer readable medium storing computer executable components of the system).

Regarding claim 18, Schofield discloses the limitation of a method for converting code for a synchronous method call on a target method to code for an asynchronous method call (column 8, lines 45 – 54, recited “ synchronous and asynchronous calls implementation), the method comprising: receiving a code for a synchronous method call (Fig. 8, element 801, client calls objects, column 12, lines 65 – 66); passing the code for the synchronous method call

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through a call conversion process to produce a code for an asynchronous method call (column 13, lines 4 – 11; recited “the call is synchronous and the implementation of the object is asynchronous” as code for the synchronous method call through a call conversion process to produce a code for an asynchronous method call); creating an asynchronous call result object to store results associated with the asynchronous method call; and creating an asynchronous call state object to store state information associated with the asynchronous method call (column 13, lines 33 – 36, 50 – 63, recited “context variable is used to store the call identifier and also to store the output parameters “ as asynchronous call result object to store results and an asynchronous call state object to store state information).

Allowable Subject Matter

3. Claims 24, 25, 27, 28, 29, 30 are allowed over prior art.

Additionally, all of the limitations in claim 26 are allowable since the claim is dependent upon the independent claim 25.

Claims 6, 7, 8, 9, 10, 11, 12, 14, 19, 20, 21, 22, 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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Response to Arguments

5. Applicant's arguments with respect to claims 1 – 30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

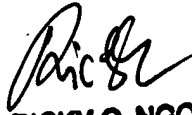
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL

April 09, 2006


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER